

Intertek

TEST REPORT

Report Number: 3182564MIN-001

Project Number: 3182564

Testing performed on the
TPOC

To

RTCA/DO-160F:2007

Section 21

Radiated Emissions for Category M Equipment

For

Invacare Corporation

Test Performed by:
Intertek Testing Services NA, Inc.
7250 Hudson Blvd., Suite 100
Oakdale, MN 55128

Test Authorized by:
Invacare Corporation
One Invacare Way, PO Box 4028
Elyria, OH 44036

Prepared by: *Norman Shpilsher*
Norman Shpilsher

Date: July 7, 2009

Reviewed by: *Uri Spector*
Uri Spector

Date: July 7, 2009

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1.0 DESCRIPTION OF THE SAMPLE (EUT)

Model:	TPOC
Type of EUT:	Portable Oxygen Concentrator
Serial Number:	Unit # 1
Company:	Invacare Corporation
Customer:	Mr. David Polacsek
Address:	One Invacare Way, PO Box 4028 Elyria, OH 44036
Phone:	440-329-6147
Fax:	440-326-3911
Test Standards:	<input type="checkbox"/> EN 55022:2006 +A1:2007, Class <input type="checkbox"/> EN 55011:2007, Group , Class <input type="checkbox"/> 47 CFR, Part 15:2008, §15.107 and §15.109, Class <input type="checkbox"/> EN 55014-1:2006 <input type="checkbox"/> EN 61326-1:2006 <input type="checkbox"/> Class for Radiated and Conducted Emissions <input type="checkbox"/> EN 60601-1-2:2001 +A1:2006 <input type="checkbox"/> Class Radiated and Conducted Emissions <input checked="" type="checkbox"/> RTCA/DO-160F:2007, Section 21, Radiated Emissions for Category M Equipment <input type="checkbox"/> EN 61000-6-3:2007 <input type="checkbox"/> EN 61000-6-4:2007 <input type="checkbox"/> EN 61000-3-2:2006 <input type="checkbox"/> EN 61000-3-3:1995 +A1:2001 +A2:2006 <input type="checkbox"/> Other
Date Sample Submitted:	July 7, 2009
Test Work Started:	July 7, 2009
Test Work Completed:	July 7, 2009
Test Sample Conditions:	<input type="checkbox"/> Damaged <input type="checkbox"/> Poor (Usable) <input checked="" type="checkbox"/> Good <input type="checkbox"/> Prototype <input checked="" type="checkbox"/> Production <input type="checkbox"/> Used

2.0 TEST SUMMARY

Referring to the performance criteria and the operating mode during the tests specified in this report, the equipment complies with the requirements according to the following standards.

TEST STANDARD	TEST	RESULT
21.5	Radiated RF Emissions	Pass

3.0 EQUIPMENT UNDER TEST

3.1 Power Configuration

Rated voltage:	<input type="checkbox"/> 120VAC <input type="checkbox"/> 230VAC <input type="checkbox"/> 400VAC <input checked="" type="checkbox"/> 16VDC from internal battery <input type="checkbox"/> Other:
Rated current:	<input type="checkbox"/> Amp.
Rated frequency:	<input type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz
Number of phases:	<input type="checkbox"/> 1 Phase <input type="checkbox"/> 3 Phases

3.2 EUT Configuration

The equipment under test was operated during the measurement under the following conditions:

- ☐ - Standby
- ☒ - Continuous Normal Operation (see details below)
- ☐ - Specific test program
- ☐ -

Operating modes of the EUT:

No.	Description
1	O2 concentrator is On, continuous O2 flow mode
2	

Cables:

No.	Type	Length	Designation	Note
1	N/A			
2				
3				

Support equipment/Services:

No.	Item	Description
1	N/A	
2		
3		

General notes: None

3.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	<u>15-35 ° C</u>
Humidity:	<u>30-60 %</u>
Atmospheric pressure:	<u>86-106 kPa</u>

4.0 TEST CONDITIONS AND RESULTS

4.1 Radiated Emissions

Description of the test location

Test location: ☐ OATS ☒ Anechoic Chamber

Test distance: ☒ 1 meter ☐ 3 meters

Test result: Pass

Frequency range: 100MHz - 6GHz

- Notes:
1. EUT and measuring equipment setup according to the DO-160F, Section 21 standard.
 2. Testing was performed in the Anechoic Chamber.
 3. Testing was performed in frequency range 100MHz to 400MHz with RBW 10kHz (Graphs 1 and 2); in frequency range 400MHz to 1GHz with RBW 100kHz (Graphs 3 and 4); and in frequency range 1GHz to 6GHz with RBW 1MHz (Graphs 5 and 6).